

## CLAIMS

What is claimed is:

1        1.        A tray for taking a dental impression comprising:

2                a frame having a generally "U"-shaped portion, wherein the bottom part of the "U"-shaped  
3        portion comprises a posterior bar;

4                a membrane supported on and integral with said frame and spanning said "U"-shaped  
5        portion;

6                a means for imparting a rigidity to the tray which is additive to the rigidity imparted by  
7        an impression material to be used to take the impression, whereby such additive rigidity  
8        primarily takes effect after the patient has bitten into the impression material, wherein such  
9        means for imparting rigidity to the tray comprises an object engaged with the frame in the tray's  
10       posterior region.

1        2.        The tray of Claim 1 wherein the object comprises an immobilizing agent other than the  
2        impression material to be used to take the impression.

1        3.        The tray of Claim 2 wherein the immobilizing agent is applied to the frame of the tray  
2        and is suitably positioned and compositioned so that when cured, such immobilizing agent  
3        would impede the frame's alteration of shape.

1        4.        The tray of Claim 3 wherein the frame further comprises a joint in its posterior and  
2 wherein the immobilizing agent is suitably positioned and compositioned to impede the relative  
3 movement of the sections of the frame bridged by the joint when cured.

1        5.        The tray of claim 2 wherein the frame further comprises a tube affixed to the frame or a  
2 channel within the frame that contains the immobilizing agent.

1        6.        The tray of claim 5 wherein the tube or channel contains internal mixing baffles through  
2 which the immobilizing agent can be passed.

1        7.        The tray of claim 2 wherein the frame further comprises a fiber optic glass.

1        8.        The tray of Claim 2 wherein the immobilizing agent comprises a material that is readily  
2 deformable when uncured but difficult to deform when cured.

1        9.        The tray of Claim 2 wherein the immobilizing agent comprises an adhesive.

1        10.       The tray of Claim 2 wherein the immobilizing agent comprises a composite.

1        11.       The tray of Claim 2 wherein the immobilizing agent comprises an acrylic.

1        12.       The tray of Claim 2 wherein the immobilizing agent comprises a plastic.

1        13.     The tray of Claim 12 wherein the plastic comprises a heated thermoplastic which will  
2        harden as it cools from mouth-tolerable temperatures to body temperature.

1        14.     The tray of Claim 12 wherein the object comprises a thermosetting plastic.

1        15.     The tray of Claim 1 wherein the frame further comprises a means for affixing the frame  
2        to an implant transfer post.

1        16.     The tray of Claim 15 wherein the buccal wall is affixed to the implant transfer post by  
2        a support member which connects the implant transfer post to the buccal wall of the frame.

1        17.     The tray of Claim 2 wherein the material comprising the frame is a color that reflects  
2        curing light.

1        18.     A tray for taking a dental impression comprising:  
2                a frame having a generally "U"-shaped portion;  
3                a membrane supported on and integral with said frame and spanning said "U"-shaped  
4        portion; and  
5                a curable or self-curing immobilizing agent that is uncured, wherein such immobilizing  
6        agent is not the impression material to be used to take the impression.

1        19.    A tray for taking a dental impression comprising:  
2                a frame comprising a generally "U"-shaped portion, wherein the bottom part of the "U"-  
3        shaped portion comprises a posterior bar;  
4                a membrane supported on and integral with said frame and spanning said "U"-shaped  
5        portion; and  
6                an uncured composite applied to the frame's posterior bar.